



#### **Outline**

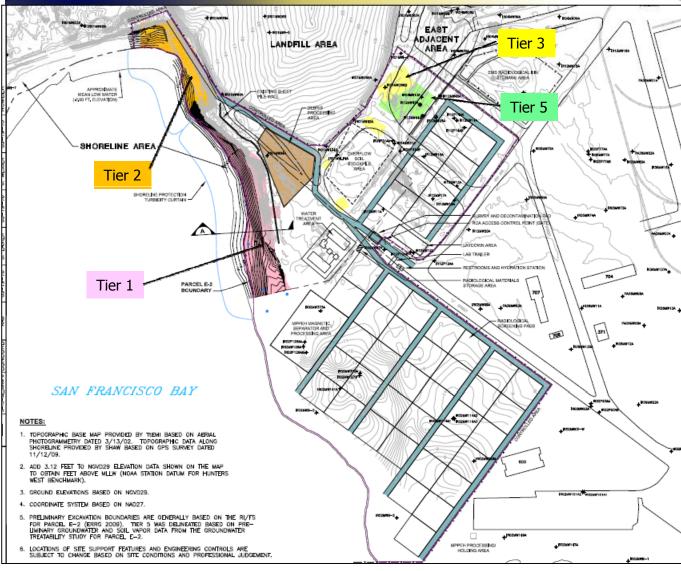


- Update on TCRA Progress
  - Tiers 3 & 5
  - Tier 2
  - Tier 1
  - Radiological Confirmation Sample Results
  - Radiological Commodities
  - MPPEH Acceptance Sampling
- What's Next
- Schedule



### **Site Layout Map**

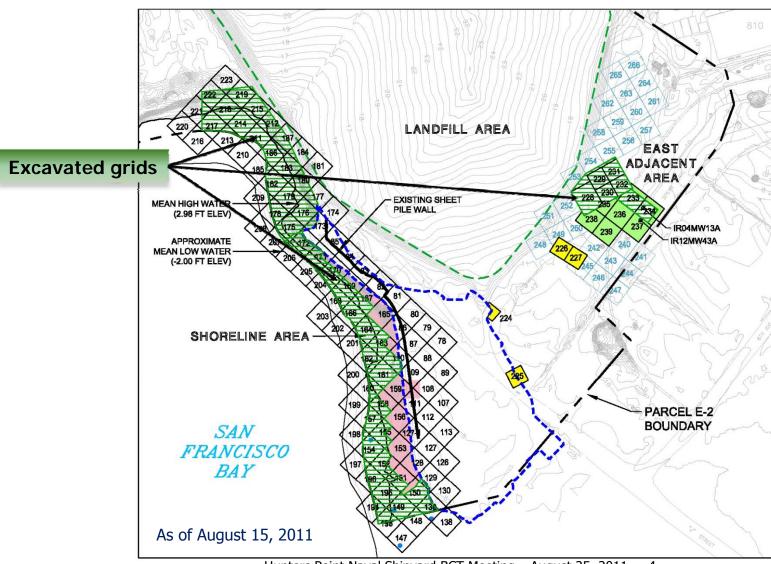






## **TCRA Progress – Completed Excavations**





Hunters Point Naval Shipyard BCT Meeting – August 25, 2011 4



#### **Update Tiers 3 and 5**



- Commenced excavation on August 30, 2010
- Tier 3
  - 100% of original Tier 3 grids excavated to depth (3-10 feet) bgs) and confirmation sampled
  - Final conditions survey completed August 16
  - Sample results are pending
  - Final conditions survey package will be prepared and submitted to RASO for approval
- Tier 5
  - No over-excavation required to date



# **Update Tiers 3 and 5 (continued)**





Tiers 3 and 5 – August 1, 2011



#### **Update Tier 2**



- Commenced excavation on October 19, 2010
  - Stopped excavation December 2010 mid April 2011
- 100% of grids excavated, sampled, and backfilled with clean sand
- Over-excavation was required in six grids
- Over-excavations completed with the exception of Grid 177 sidewall
- Construction access road currently prevents overexcavation of Grid 177 sidewall - will be overexcavated after geotechnical investigation



# **Update Tier 2 (continued)**





Tier 2 – August 2, 2011



### **Update Tier 1**



- Commenced excavation on May 11, 2011
- Approximately 51% of grids excavated, sampled, and backfilled
- Received 92% of collected confirmation sample results, remaining are pending
- Currently, two grids require over-excavation



View of Tier 1, looking northwest



## **Update Tier 1 (continued)**





Excavation of Grid 139 – August 8, 2011



## **Update Tier 1 (continued)**





Surveyors Marking out Grid 129 for Excavation – August 8, 2011



# Confirmation Sample Results Exceeding Radiological Release Criteria



Tier	Grid	Sample ID	Sr-90	Ra-226	Cs-137
			(pCi/g)	(pCi/g)	(pCi/g)
1	110	G110-B-10	0.403 (DUP)	6.241E-01	-1.084E-02
1	149	G149-B-10	<mark>0.370</mark>	3.442E-02 (MDA)	5.319E-01
1	154	G154-SW-4	<mark>0.449</mark>	7.591E-01	1.492E-04
1	160	G160-SW-3	0.540 & 0.501 (DUP)	2.226E-01	1.917E-02
2	176	G176-B-5	<mark>0.401</mark>	1.232	3.951E-02 (MDA)
1	198	G198-B-3	<mark>0.519</mark>	6.078E-01	1.739E-02
1	204	G204-B-3	<mark>0.390</mark>	1.120	-2.739E-03
1	205	G205-SW-3	<mark>0.469</mark>	9.387E-01	1.117E-02
2	207	G207-SW-3	<mark>0.477</mark>	8.468E-01	3.459E-02
2	211	G211-SW-3	<mark>0.812</mark>	1.070	1.918E-02
2	215	G215-SW-4	<mark>0.351</mark>	1.181	6.275E-03
2	217	G217-B-3	0.0119	<mark>1.7307</mark>	4.7923E-02
2	217	G217-SW-3	<mark>1.04</mark>	5.356E-01	-5.169E-03
2	219	G219-SW-4	<mark>0.712</mark>	4.990E-01	3.763E-02 (MDA)

DUP – duplicate sample

MDA – minimum detectable activity

Release criteria:

Sr-90 - 0.331 pCi/g

Ra-226 – 1.63 pCi/g

Cs-137 - 0.113 pCi/g



# **Radiological Commodities**



Origin	Item Inventory	Item Description	Dose Rate@ 1"
	Number		(uR/hr)
Grid 233/232	HPS-COM-001	Metal Disc	800
Grid 228	HPS-COM-002	Cooper Tube	600
Grid 235	HPS-COM-003	Metal Nugget	200
RSY B6	HPS-COM-004	Metal Disc	1,400
RSY C1	HPS-COM-005	Metal Disc	1,000
RSY C3	HPS-COM-006	Rock	800
RSY E8	HPS-COM-007	Rock	100
RSY D2	HPS-COM-008	Soil	240
RSY C4	HPS-COM-009	Metal Plate	460
RSY E8	HPS-COM-010	Hydraulic Fluid Container	1,200
RSY B4	HPS-COM-011	Rock	230
RSY B3	HPS-COM-012	Radioluminescent Disk	160
RSY C6	HPS-COM-013	Radioluminescent Disk	2,000
RSY E3	HPS-COM-014	Rock	470
RSY E3	HPS-COM-015	Rock	500



# **Radiological Commodities (continued)**



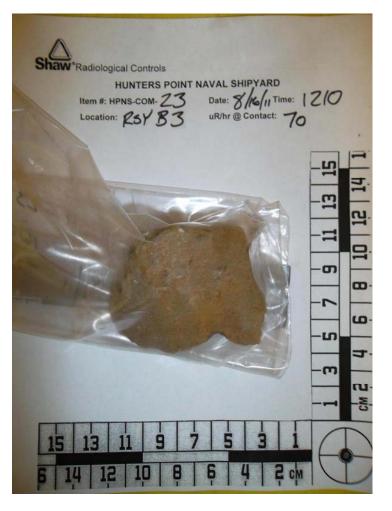
Origin	Item Inventory Number	Item Description	Dose Rate@ 1" (uR/hr)
RSY C4	HPS-COM-016	Metal Strip	600
RSY C4	HPS-COM-017	Metal Strip	800
RSY C4	HPS-COM-018	Rock	30
RSY D8	HPS-COM-019	Sound Powered Phone Jack	2,900
RSY D8	HPS-COM-020	Sound Powered Phone Jack	2,500
		cover plate	
RSY C4	HPS-COM-021	Rock	70
RSY B3	HPS-COM-022	Soil	600
RSY B3	HPS-COM-023	Rock	70



## Radiological Commodities (continued)







Soil Rock



## **Radiological Screening of RSY Pads**





Rad Tech Performing a GWS on RSY Pad B1 – August 2, 2011



# **Radiological Screening of RSY Pads**





Rad Tech Sampling RSY Pad A3 – August 3, 2011



## **Concrete Processing**





Rad Tech Surveying Concrete – August 2, 2011



## **Concrete Processing (continued)**





Concrete Processing Piles – August 4, 2011



#### **MPPEH Acceptance Sampling**



- Began implementing on July 5, 2011
- Using GPS to locate 183 randomly-generated 3 x 3-foot grid cells on each screening pad
- Shaw UXO tech sampling process
  - Investigate all metal responses and remove all metal ≥ 20mm (equivalent size to cartridge casing) from grid cells, then backfill for QC and 3<sup>rd</sup> party QA
- Shaw QC
  - Inspect 20% of all cells
  - If ≥ 20mm metal is found, then conduct a thorough review of procedures with UXO techs
- Independent 3<sup>rd</sup> Party QA (ERRG):
  - Inspect 20% of all grid cells
  - If ≥ 20mm metal found by QA, then 100% investigation of entire screening pad may be required



# MPPEH Acceptance Sampling (Continued)



- Sampling at reduced inspection level for Tier 1 material because 10 RSY pads have been inspected without any MEC/MPPEH findings
- 12 MDAS items encountered
- No MEC encountered to date

MPPEH Clearance Pad Status			
Action	Status (As of August 17)		
MPPEH Screening by Acceptance Sampling Complete	17 Pads (approx 3,400 cy)		
MPPEH QC Complete	17 Pads (approx 3,400 cy)		
MPPEH QA Complete	17 Pads (approx 3,400 cy)		



# **MPPEH Acceptance Sampling** (Continued)





MPPEH Acceptance Sampling – August 4, 2011



# MPPEH Acceptance Sampling (Continued)





MPPEH Acceptance Sampling – August 16, 2011



#### **Update**



- Filled 117 roll-off bins with LLRW
- Transferred approximately 5,500 cubic yards of non-
  - LLRW to ITSI for offsite disposal (anticipated start date 2<sup>nd</sup> round of hauling Aug 29)
- Used water from frac tank#2 for dust control
- Frac tank#2 demobilized
- Continued erosion control and fence line inspections
- Continued collecting water samples outside turbidity curtain
- Continued air monitoring





#### What's Next



Continue offsite T&D

Continue implementing Acceptance Sampling for MPPEH

clearance

 Continue excavations and over-excavations

- Receive RASO approval on final conditions survey package for Tier 3
- Re-commence Tier 5 excavation





# **Schedule**



Activity	Date
Continue Hot Spots Excavation and Soil Screening; Extended MPPEH schedule	August – December 2011
Implement Acceptance Sampling Procedures	August – December 2011
Continue Backfill and Site Restoration	August 2011 – January 2012
Demobilize	January 2012
Submit Draft Removal Action Completion Report	March 2012